



## President's Message

by

RUTH E. HOPSON

Last year, I had already purchased my train ticket to New York when serious illness and subsequent death of my father prevented me from attending the meetings.

When I made the reservations for the trip, I asked whether there was any material on the geology of the route (Northern Pacific), since when traveling on the train, I had always wished for such information. They loaned me a copy of U. S. G. S. Bulletin 611, *Guide Book of Western United States, Part A, The Northern Pacific Route*, by Marius R. Campbell and others. 1915. This book discusses geology and economic values along the route of the railroad. I read the book with much interest even though I did not make the trip. Previously, I had traveled that route a number of times.

As I read, I became more and more impressed with the unique opportunity that railroads have to offer an unusual educational and recreational experience to those who travel by train.

Last April, I went from my home in Portland, Oregon, to the Wilderness Conference in San Francisco by way of the Shasta Daylight (Southern Pacific). This was my first chance to test some of my ideas. Friends who were also interested in natural history were on the train and we botanized all the way. Along the upper Sacramento valley, California red bud was a magnificent sight. The burnished gold of the new growth on the California black oaks added to the beauty of the canyon.

The dome car offered unobstructed views of changing panoramas. The succession of life zones as we climbed toward the summit of the Cascades, crossed to the east side and moved on southward into California was marked first by the Douglas fir forest (Humid Transition Zone), followed by the lodgepole pine forest (Canadian Zone), then the ponderosa pine forest (Arid Transi-



Stan Mulaik hands Ruth Hopson the scroll and gavel.

tion Zone), the western juniper and sagebrush (Upper Sonoran Zone) and on into California where digger pines invade this zone. For many miles as the train passed Mount Thielsen, the peaks of the caldera of Crater Lake, the Klamath graben, and wound its way past Mount Shasta, the landscape was the subject of conversation for my friends and me as we watched from the dome car. As we observed excitedly the western grebes on Klamath Lake, a new species of tree coming into view for the first time, a peak that represented another phase of the geologic story, others around us in the dome car began to ask questions and to join us in our observations. We all had a wonderful time.

The railroads were built long enough ago that nature has healed the scars of their construction. One experiences wild-

continued on page 4

## Natural Areas For Schools Urged

The need for suitable natural areas near schools is a critical one. Action to save potential areas for schools must be stepped up. For some schools it is too late. For others much can be saved.

The Nature Conservancy is very actively working to help schools preserve such areas where they are available. Dr. John Brainerd is chairman of the Conservancy's National Committee for Natural Areas for Schools. At the New York meeting John proposed that ANSS endorse the following NCNAS statement. The proposal received a favorable vote of the Board:

*"The American Nature Study Society, being deeply interested in the natural resources of our country and their wise use through countless succeeding generations, hereby goes on record as giving moral support to the Nature Conservancy's National Committee for Natural Areas for Schools."*

*"We know that outdoor studies stimulate many people to increase their indoor pursuit of knowledge, and we realize that relatively natural areas hold many lessons which courtyard and playfield cannot provide."*

*"Therefore, we urge communities to set aside for their schools and colleges adjacent or nearby areas where nature study is the primary purpose, and that these areas be secure from the many disruptive uses pressed for by our crowding culture. Far-sighted policies and hard work must maintain relatively natural areas for education in many fields of knowledge. We endorse this work and earnestly solicit your help in your community."*

### ANSS HEADQUARTERS

For the Denver meeting will be in the Shirley Savoy Hotel. Send in your registration to AAAS Housing Bureau, 225 West Colfax Avenue, Denver 2, Colorado.

## AMERICAN NATURE STUDY SOCIETY NEWS LETTER

Affiliated with  
The National Association of Biology Teachers  
The National Science Teachers Association  
The American Association for the Advancement of Science  
Publication Dates: Spring, March; Summer, June; Fall, September; Winter, November

### Editor

STANLEY B. MULAİK  
University of Utah  
Salt Lake City 12, Utah

### Society Officers

President  
RUTH E. HOPSON  
4138 S. W. 4th Ave.  
Portland 1, Oregon

President Elect  
S. GLIDDEN BAIDWIN  
R. R. 1  
Catlin, Illinois

1st Vice-President  
and Membership Chairman  
DOROTHEA MULAİK  
1144 E. 3rd So  
Salt Lake City, 2, Utah

2nd Vice-President  
and Affiliates Chairman  
JOHN W. BRAINERD  
836 Wilbraham Rd.  
Springfield 9, Mass.

Secretary  
BETH SCHULTZ  
Department of Biology  
Western Michigan University  
Kalamazoo, Mich.

Treasurer  
MILDRED RULISON  
754 Greenview Place  
Lake Forest, Illinois

## National Issues

There are two basic aspects of the problem of outdoor recreation in America. One is that of the people with respect to what they will do with the increased leisure related to the changes in their travel habits, the kind of outdoor recreation opportunities they will want, and what they are willing to spend out of a growing per capita income.

The other aspect is that of the natural resources and how these will be made available to meet the needs and desires of the American people seeking outdoor experiences. The mountains, lakes, sea shores, streams, and forests form the basic material which the public will use, but which must be carefully preserved that the essence which makes it desirable to preserve for recreation is not destroyed by recreational use.

These two basic phases are being studied by the Outdoor Recreation Resources Review Commission created by Congress. Much progress has been made, but to project the study to make some predictions and recommendations to meet the expected demand for recreational areas by 1976 and 2000 is a real challenge. Mr. Laurance S. Rockefeller is chairman of this commission.

Several progress reports have been published which might still be available for those who are interested. Final studies of a number of phases of this complex resource use problem are nearing completion by institutions and organizations which have carried out the studies under contract. We believe that when the results of the study are made available, there will be some clear cut recommendations to be made to Congress and to the states.

The outdoor recreation problem is a complex one, and every ANSS member has an obligation to make himself acquainted with its many facets.

\* \* \*

The years of struggle for the creation of the Cape Cod area into a National Seashore finally paid off to Cap'n Bill Vinal who gave unselfishly of his effort and time.

Recently President Kennedy signed S. 857 establishing the Cape Cod National Seashore in Massachusetts. This area includes 26,670 acres. It is noteworthy that the Senate Committee on Interior and Insular affairs reported favorably on S. 543 promoting the preservation of several shoreline areas.

The Senate passed S. 476 establishing the Point Reyes National Seashore in California. The House will consider this bill early next year when it convenes.

\* \* \*

President Kennedy signed S. 2187 on August 30, 1961, which implements provisions of the International Convention for the Prevention of Pollution of the Sea by Oil. It is now Public Law 87-167.

Pollution of the sea by oil resulted in the loss of thousands of birds, fish and other wildlife resources, and contaminated many recreational beaches. The United States was the last of the many nations whose legislative body voted to permit acceding to the International Treaty.

## TRADE BUTTERFLIES

Bjorn Olavsson Holta, a high school student at Gjøvik, Norway wishes to exchange butterflies with American students. He is particularly interested in *Diuma* and *Sphingidae*.

"The Wilderness Trail" is the title of a new color film on the wilderness lands of the national forest just released by the U. S. Forest Service. This is a 16 mm, 14½ minute film produced in the Bridger Wilderness Area, Bridges National Forest, Wyoming.

## What Makes A.N.S.S.???

The members (not the board or the officers) ARE the Society. The ANSS is as strong as its members make it. The Society grows in stature and strength in terms of what each member does in his own sphere of influence to promote its aims and forward its objectives. Such action at the local level impresses the community and gives prestige to a national society.

"The ANSS has much to offer which is basic in the life and character of every child and adult. It is the desire to know and understand something of the world in which they live, to know it more appreciatively and fully. That is the essential character of the ANSS. Out of that group of appreciators come the men and women leaders of other groups, and when they condescend to promote the ANSS, they are also promoting themselves. We need to mention ANSS and what it stands for in every way possible. Out of this will grow more respect for the Society which has nothing for which we cannot be proud, and much for which we can be proud, and which the world should know about. We need to start some place, and this is a good place to do so."

The above comment was made by a staunch member, Clyde T. Reed, at the ANSS's Council Meeting held at Chicago in December 1959.

\* \* \*

An unplanned temporary incapacity of your Editor early in September severely delayed final work on the Autumn number of the NEWS LETTER. After a three-week "vacation" at the hospital, followed by several weeks at home, the manuscript for that issue was sent to the printers.

Hindsight reveals that several things planned to be included were omitted. The limitations of space, plus "lapses," were in part responsible. While some national conservation issues were mentioned, perhaps more pertinent ones were neglected. In this and other issues, actions and decisions by your Board and Executive Committee should have had wider coverage.

However, the readers who have responded with the Editor have generally praised the NEWS LETTER, or were at least neutral to it, which is not discouraging. It would be very valuable to receive adverse criticism with suggestions for improvement because it certainly would be improved if more people were involved. We hope to hear from more of you.

# Nature Study TIPS

A Service of the American Nature Study Society

NEWS LETTER INSERT

NOVEMBER, 1961

## Nature At School—Survival By Use

JOHN BRAINERD

Springfield College, Massachusetts

The new chemistry of the latter half of the Nineteenth Century, the improved physics and its instruments, the cytology, physiology, and genetics of revitalized biology, all these and many more sciences have created a new world with new problems to challenge today's education — a world of speed and concrete, a world where our ability to communicate fast is matched only by our ability to wall ourselves off psychologically from one another. This "TIP" will try to be sharp and penetrating, revealing the whetted edge of nature education as it is being unsheathed to attack some of the greatest problems of our times, the dilemmas of a culture created by a hundred years of study of nature in the laboratories of science.

Close attention to nature in the laboratory will continue to be very important. The one-thing-at-a-time studies of bits of nature under controlled conditions indoors must go on. Poking fun at "closet scientists" has not helped anybody. Their dedicated work is basic to increasing our understanding of ourselves and the world in which we live. But such work must be balanced with more studies of nature in all its beautiful complexity outdoors. Baffling? Yes. Is there not a kind of sanity and serenity that comes to the person who genuinely tries to understand himself in relation to the universe, even though his efforts seem puny indeed?

### THE CHALLENGE

How can we compensate for the weaknesses of our culture even as we enjoy its great advantages? There is no one answer, but we have no doubt that a closer attention to nature can help overcome some of our greatest difficulties. Those who are entrusted with the teaching of children at school and camp, or who are helping with adult education, have a challenge to help others to observe nature more closely and with greater sensitivity to what she can teach us.

### THE SCHOOL GROUNDS

The greatest opportunity for nature education today is at school, where most of the exposure to things-to-be-learned is in the classroom. Exceptions include exercises in the gymnasium, the pool and

on the playground under the leadership of physical educators; corridor duty for the school patrols; library studies; training in the shop, home economics, and vocational agriculture; and rare trips to museums, industries, and the like. Each of these worthy exceptions has had to fight its battle to earn school time, to merit financial support and to attain enough dignity for cohabitation with the Three R's. Today nature study, which has lost the status it won in the early Twentieth Century, must again struggle to make a better place for itself. This must be an effort not necessarily to make a place in the curriculum but rather to achieve a place on the school grounds — a genuine place in the sun. It is on the school grounds rather than in the curriculum that a pupil can learn better his place in the scheme of things.

### VARIETY OF ENVIRONMENTS

*The school with the greatest variety of outdoor environments will teach the most about man's relation to nature.* There is an important truth here even though it can be profitably argued. Comparable ideas: The university with the most volumes in its libraries is the best for graduate studies; the school whose teachers have had the widest variety of experiences can give the best education. In each case of course other factors must be considered; but the rule is useful even though it has exceptions. The exceptions

may be disputed, not the rule.

Every teacher who believes in the study of man's place in nature should have a copy of Nature Conservancy's free leaflet, A CHECKLIST OF EDUCATIONALLY USEFUL ENVIRONMENTS ON SCHOOL-CONTROLLED PROPERTY (Available from John Brainerd, Springfield College, Springfield 9, Massachusetts). He should work actively to increase the richness of the school environment just as he or she should push for better library, art or laboratory facilities. In many communities, the school that does not set aside wetlands, knolls, woodlands, and shrublands now, may find it impossible to do so in the very near future; for our culture of speed and cement is burying many of our schools alive.

### WHAT CAN ONE TEACHER DO ???

Never underestimate the power of yourself, especially if your class works with you, and your class will work with you if they feel useful. Well-adjusted children have fun being useful, and poorly adjusted children often become better if they feel that they are important. So, seek out some problem that seems important to your class and try to find its relation to the school grounds. Then get them working on that problem. Below are a few examples, with suggested grade level:

*Grade One:* What colors are there in



Students gardening at Bryan High School, Yellow Springs, Ohio



the world around us? Explore the world just outside the window; make big pictures and simple lists. On the bulletin board report the findings to the whole school. (Color blind pupils can "collect" lights and darks, an important inventory that many older students may never have considered.)

**Grade Two:** Our world has hot spots, cold spots and just-right spots. Hunt for them on the school grounds and watch them change during the day and as the seasons come and go. Using maps made by older classes, record the distribution of these microclimates. File the best records for interesting comparison with data to be collected in ensuing years.

**Grade Three:** How big are our school grounds? Use a foot rule, yardstick, string and pacing to make arithmetic a meaningful tool for helping them discover the important boundaries of the relatively safe little world of the school yard. Some simple fractions will help them measure how much of the playground is their share, and how much is reserved for the big children and for the grown-ups' cars. Also, how much is paving from which the water runs off, and how much is grass where the water soaks in? These are matters of social as well as mathematical significance.

**Grade Four:** How can we use words to describe our school grounds? Let children find things and use nouns such as tree, shrub, vine, herb; slope, valley, hill, stream; sand, loam; desert, grassland, wetland, treeland, shrubland; height, wall, pavement. Note action and use verbs: to live, to die, to grow, to erode, to cool, to heat, to help, to destroy. Then introduce other parts of speech to give vitality to writing and discourse about the nature of the school grounds. Stress accurate observations, faithful recording, but with an imaginative treatment of subject. Perhaps the children can suggest educationally valuable things which could be added practically to the school grounds, creating greater variety, such as a chipped stone birdbath or a wind vane.

**Grade Five:** What animals share our school grounds with us human animals? Make a list of kinds, even if limited to ants, house sparrows, pigeons, starlings, and dogs. How much of the school grounds does each kind of animal use? How much of the day, the season, the year does each kind use it? How many of each kind use the school ground? Does any kind prefer a particular area? Do the animals conflict or cooperate with what the children and teachers do at school? Can a better sharing of the grounds be worked out?

**Whatever Grade:** Vertical planning of curricula is of course important so that pupils do not become bored with needless repetition or have barren spots in their basic knowledge as they progress through

the grades. Most of the above suggestions can be carried out at levels other than those indicated, by making the subject simpler or more complex according to the abilities or background of the students. Many children in grades six through twelve today have lacked such training in earlier grades and should have opportunities at these upper levels for just such first-hand contact with natural resources.

### SURVIVAL BY USE

Nature has a way of atrophying organs of the body which are not used. Similarly, our culture today wastes natural areas which seem useless. To many city-bred and poorly educated people, a bit of brushland, a bog, a burned-over woodlot, and an abandoned gravel pit are unproductive areas. They never learned in their schooling that these are important components of watersheds, habitats for wildlings, and buffers and healing sights for cement-sore eyes and gear-grated sanity. To them such areas seem useless and therefore ugly, so must be destroyed to make room for some constructive purpose like housing or industry. Many men can appreciate only what they themselves have labored to create, being ignorant of and disinterested in what nature may have been building miraculously for centuries. But today an ever increasing number of people respect the importance of schools and are beginning to realize that if a school uses a natural area for education maybe it is worth saving rather than putting it to other purposes. Thus teachers can help save natural resources for study just by studying them! This is more than theory, since many cases on record support this.

### USING WITHOUT DESTROYING

Teachers and school administrators

must work together to plan to use outdoor areas on a sustained-yield basis. School environments should be mapped (by the children, of course). Then for each type of environment, such as tree-land, shrubland, herbland, bareland, and wetland, a decision should be made as to how much can be left alone for observational study, as a natural area, and how much can be managed experimentally. Children need activities such as tree planting, thinning, pruning, and harvesting; experimenting with soil erosion; damming and undamming brooks; building causeways in a marsh; and so on. They also need the experiences of stepping into a bit of nature which has not been modified by Man-with-all-the-answers. They need to be puzzled by the complexity of a nature-managed environment, to be sensitized to its beauty. Young people need to walk the narrow trail as well as romp the bulldozed field. Schools must have both Managed Areas and Natural Areas, and of as many types as possible.

### WHAT IT TAKES

At many schools, it is now or never for procuring outdoor laboratories and natural environments with some variety. Many schools destroy their educational resources outdoors even as they develop the site. Others lose out by neglect, because teachers do not use what they do have. The quality of education at a school for the countless coming decades and even centuries can depend upon *just one teacher* who knows that one bird at hand is worth two in the book, *just one teacher* who has foresight and can tactfully with other teachers and the school administration to convince them that there is more to be learned on school grounds than just how a ball bounces. OUR TIP: YOU may be that teacher.



Water life attracts students everywhere

# Annual National Meeting of American Nature Study Society

WITH AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

Shirley Savoy Hotel, Denver, Colorado, December 26-30, 1961.

A N S S Headquarters — Room 251

This is your Convention Program. Bring it with you to Denver.

## Tuesday Evening, December 26

7:30 P.M. — Room 251; ANSS Meeting of Board of Directors

## Wednesday Morning, December 27

9:30 A.M. — Lincoln Room; Joint Meeting of all Teaching Societies Symposium on Molecular Biology, ALFRED NOVAK, Stephens College, Columbia, Missouri, Presiding.

1. Genetic Architecture. JAMES BONNER, Professor, Department of Plant Physiology, California Institute of Technology.
2. Molecular Structure of Proteins, HENRY BORSOOK, Head, Department of Biochemistry, California Institute of Technology.
3. Enzymes and Their Relation to the Molecular Architecture of the Cell. IRWIN W. SIZER, Head, Department of Biology, Massachusetts Institute of Technology.
4. Discussion

## Wednesday Afternoon, December 27

2:00 P.M. — Centennial Room; Nature Study Around the World, S. GLIDDEN BALDWIN, President-Elect, ANSS, Danville, Illinois, Presiding

1. A Naturalist Explores Iran. JOHN F. WANAMAKER, Professor of Biology The Principia, Elmhurst, Illinois.
2. Secondary School Science Teaching in Brazil. PAUL KLINGE, Editor, American Biology Teacher, Indiana University, Bloomington, Indiana.
3. Introducing General Science in Pakistan, RICHARD L. WEAVER, Dept. of Conservation, University of Michigan, Ann Arbor, Michigan.
4. World Wide Interest in Nature & Conservation, MRS. S. GLIDDEN BALDWIN, Vice-Chairman, Illinois Chapter, Nature Conservancy.

5:00 P.M. — Lincoln Room; Joint Mixer and Coffee Hour. All Societies. Sponsored by General Biological Supply Co.

## Wednesday Evening, December 27

7:30 P.M. — Room 251; ANSS Meeting of the Board of Directors

## Thursday Morning, December 28

9:00 A.M. — Silver and Blue Spruce Rooms; Outdoor Nature Interpretation. OLAUS J. MURIE, Director, The Wilderness Society, Moose, Wyoming, Presiding.

1. Nature Interpretation in the Desert; W. H. WOODIN, Director Arizona-Sonora Desert Museum, Tucson, Arizona.
2. Grasslands Natural History Reservation; TED F. ANDREWS, Head Dept. Biology, Kansas State Teachers College, Emporia, Kansas.
3. The Role of National Parks in the Field of Nature Interpretation; EDWIN C. ALBERTS, Regional Naturalist, National Park Service, Omaha, Nebraska.
4. Guided Versus Self-Guided Activities in National Parks Nature Interpretation; WAYNE W. BRYANT, Chief Naturalist, Rocky Mountain National Park, Estes Park, Colorado.

## Thursday Afternoon, December 28

1:00 P.M. — Room 251; Nature Counselors Certification Committee Meeting, JOHN BRAINERD, Chairman.

2:00 P.M. — Lincoln Room Conservation and International Resource Development. Joint Symposium ANSS-NABT. BOB SMITH, 3rd Vice President NABT, Presiding.

1. Conservation of Resources of the Mediterranean Area; DR. WALTER P. TAYLOR, winner of Leopold Memorial Medal Award, Claremont Graduate School, Claremont, California.
2. Resource Use in Pakistan; DR. RICHARD L. WEAVER, Dept. of Conservation, University of Michigan, Ann Arbor, Michigan.
3. Conservation of Natural Resources in New Zealand; FRANK O'LEARY, Staff Photographer, The Glenbow Foundation, Calgary, Alberta, Canada. Recently of The Dominion Museum, Wellington, New Zealand.
4. Conservation and Resource Use in Thailand, ROBERT C. LEESTMA, School of Education, University of Michigan, Ann Arbor, Michigan.
5. Summary; S. GLIDDEN BALDWIN, President-Elect, ANSS, Danville, Illinois.

4:30 P.M. — Room 251; ANSS Meeting of the Board of Directors

## Thursday Evening, December 28

7:30 P.M. — Colorado Room; ANSS Kodachrome Showing, DR.

JOHN WANAMAKER, Professor of Biology, The Principia, Elmhurst, Illinois, Presiding.

## Friday Morning, December 29

8:00 A.M. — Joint Field Trips ANSS and NABT. Meet in Lobby. Return by 4 P.M.

West Field Trip — Will travel to the Foothills and Front Range and the famous Red Rocks Theatre crossing Pre-Cambrian gneiss and schist and giant out-cropping of red arkosic sandstone, then on to the Genesee Mountains area, etc. Geology plant and animal life. 100 miles.

Leaders: DONALD M. THATCHER, (Colorado Bird Club) Denver

DAVID O. DAVIS, (Soil Conservation Society of America) Denver

South Field Trip — Will travel along the Transition Area between the Mountains and the Great Plains on the way to the famous Garden of the Gods at Colorado Springs, etc. Geology plant and animal life. 100 miles.

Leaders: PAUL W. NESBIT, (American Nature Study Society) Colorado Springs.

HERBERT I. JONES, (American Society of Range Management), Denver.

9:00 A.M. — Alternate Program — For those not going on field trips. Empire Room, NABT Biology Film Showing.

## Friday Afternoon, December 29

2:00 P.M. — Empire Room; NABT Biology Film Showing — Alternate program.

4:00 P.M. — Blue Spruce Room; ANSS Annual Business Meeting. All members.

4:00 P.M. — Silver Spruce Room; Joint Societies 1962 Planning Committee meeting.

## Friday Evening, December 29

6:30 P.M. — Colorado Room; Annual ANSS Banquet, DR. RUTH E. HOPSON, President, Portland Extension Center, Portland, Oregon, Presiding.

Banquet Speaker, DR. S. GLIDDEN BALDWIN, President-Elect. Topic-Nature Adventures Around the World, a movie with sound recorded by MRS. BALDWIN. A report on their recent 8 months Wildlife Survey.

## Saturday Morning, December 30

9:00 A.M. — Colorado Room; Natural History of the Rocky Mountains. Arranged by DR. RUTH E. HOPSON, President, ANSS, Portland Extension Center, Portland Oregon, DR. RUTH E. HOPSON, Presiding.

1. The Physical Evolution of the Rocky Mountains. Illustrated Chalk Talk. S. H. KNIGHT, Head Department of Geology, University of Wyoming, Laramie, Wyoming.
2. From Plains to Peak Tops. The changing panorama of animal life, plant life, and scenery from the Colorado plains to the high country. RICHARD G. BEIDLEMAN, Association Professor, Zoology Department, the Colorado College, Colorado Springs, Colorado.
3. The Lure of Nature in the Mountains. PAUL W. NESBIT, 711 Columbia Road, Colorado Springs, Colorado.
4. Animals in the Freedom of The Rockies, OLAUS J. MURIE, Director, The Wilderness Society, Moose, Wyoming.

## Saturday Afternoon, December 30

2:00 P.M. — Denver Museum of Natural History, City Park, Joint ANSS-NABT Session on Museum School Service and Displays, DR. ALFRED M. BAILEY, Museum Director, Presiding.

1. Museum School Service and the Planetarium, ROBERT E. SAMPLES, Curator of Planetarium. Preparation of Museum Displays
2. The Evolution of Life Series, ARMINTA P. NEAL, Curator of Graphic Design.
3. The Habitat Group, DR. ALFRED M. BAILEY, Director.
4. Background Work, WILLIAM H. TRAHER, Staff Artist.
5. Foreground Building, ROBERT R. WRIGHT, chief Preparator, Accessories.
6. Preparation of specimens, HENRY C. WICHES, Curator of Mammals.
7. Field Work, Expedition film (Galapagos Islands.)
8. Museum Tour.

## Good Reading

The third printing in 1960 of H. Jean Berger's "Inspirational Poetry for Camp and Youth Groups" is a tribute to its continued popularity. "Dedicated, in grateful appreciation, to my friends who have helped me to learn to love the out-of-doors by sharing their bits of verse with me through camp days and inspirational services." The dedication gives an inkling of the scope of the contents. The author states "It is my desire that this collection may instigate poetry collections for youngsters, leaders, campers, and counselors who love the out-of-doors." Burgess Publishing Company, 426 South Sixth St., Minneapolis 15, Minn. \$2.50, 121 pg.

\* \* \*

A 1960 publication which will answer many of the questions, teachers and other youth leaders ask about how to care for "pets" is titled "Small Pets from Woods and Fields" by Margaret Waring Buck. This book tells how to house and care for small creatures in the classroom or at home.

The coverage of this book is excellent. Part I deals with the making of terrariums, and the best way to keep plants, amphibians and reptiles, and how to obtain these. Part II deals with Vivariums and how to house and care for the great variety of insects and spiders which are available. Part III discusses cages for mammals and permissible birds. There is a section on attracting birds to the home and school grounds by use of suitable bird houses and feeders.

This book is available from the Abingdon Press in New York, N. Y. and Nashville, Tenn. 72 pp. \$1.75 paper. \$3.00 cloth.

\* \* \*

Members of ANSS have had much interest in the Nature Magazine Special Educational Inserts which have been continued in the Natural History Magazine since January 1960. Dr. E. Laurence Palmer is still the author of these inserts, and has expanded them for Natural History from eight pages to twelve. These enlarged inserts are available at 30 cents each, for ten or more at 25 cents, and for fifty or more at 15 cents each.

The following are the subjects of the last four issues on hand:

- Insert 110, March '61, "Marine Algae"
- Insert 111, April '61, "Stream Edges"
- Insert 112, Oct. '61, "Spiders and Webs"
- Insert 113, Nov. '61, "The Lichen Partners"

These and earlier issues may be obtained at the above prices from: Natural History Magazine, Central Park West and 79th St., New York 24, N. Y.

## Doings of Members

Our good member, SHIRLEY MILLER, has prepared "The Story of Birds" as the theme for the 1961-62 Audubon Junior Program. This theme will no doubt be a great stimulus to the expansion of the Program which deals with one of the most colorful as well as musical group of the animal kingdom. The Program will not only help youngsters to learn about birds themselves, but will help the curious to see the many interrelating features among all life, both plants and animals.

The Leaders' Guide which goes to any one who has a group of children in the program gives suggestions on a Unit on Birds particularly suited to classroom schedules. In addition there are suggestions for incorporating bird study into the language arts, social studies, geography, elementary science and the creative arts.

Write to Miss Shirley Miller at the Audubon House, 1130 Fifth Avenue, New York 28, New York, for a sample kit. Here one will find a vital program to present, and not just a crutch.

\* \* \*

JOHN BRAINERD, chairman of the committee for Certification of Nature Counselors has prepared a tentative outline of criteria which has gone to his committee for suggestions of improvement.

## PRESIDENT'S MESSAGE

continued from page 1

erness for miles riding along in a dome car. Only where the route crosses highways, or parallels them, or comes into towns, does the ugliness inherent in our civilization contrast with the beauty of the wilderness.

Now I am looking forward to the trip to Denver for this year's meetings. I wish the railroad would supply interpretive materials to help others as well as me to enjoy the trip more. This time it will be the route of the Union Pacific that I shall travel from Portland to Denver.

An interpretive service such as is provided in National Parks would be a fine addition to any type of travel. Books and pamphlets should be supplied that explain and identify the natural history features, including geology. I have written only about the railroads. Other means of transportation offer other opportunities. Perhaps we as naturalists can use our influence and ability to provide these materials and services.

Plan now to attend the Denver meeting. Bring your ideas for a better American Nature Study Society to our business meetings where we need you to help chart our course. If you cannot come this year, please write me your ideas so they may be considered at the meetings.

Happy Nature Studying!

## Application for Annual Membership

Membership in the American Nature Study Society includes a membership card, a quarterly NEWSLETTER and the magazines you select. Please note you can get your membership for less than \$3.00, even free, by selecting the proper group.

**Group Cost Publications Received** (All include ANSS Newsletter and Nature Study Tips)

1. \$3.00 Membership only
2. 4.00 Membership with Cornell Science Leaflet (4 issues)
3. 5.50 Membership with Canadian Audubon Magazine (5 issues)
4. 6.50 Membership with Cornell Science Leaflet and Canadian Audubon
5. 7.00 Membership with Natural History
6. 8.00 Membership with Cornell Science Leaflet and Natural History
7. 9.50 Membership with Canadian Audubon and Natural History
8. 10.00 Membership with Canadian Nature, Natural History, Cornell Science Leaflet
- F. For Family Membership, add \$1.50 to the cost of group selected. Circle group desired, send application with name and address and check to:

Mrs. Mildred Rulison, Treasurer  
754 Greenview Place  
Lake Forest, Illinois

AMERICAN NATURE STUDY SOCIETY  
Western Michigan University  
Kalamazoo, Michigan

Non-Profit Organization  
U. S. Postage  
PAID  
Kalamazoo, Mich.  
Permit No. 789

